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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,832	10/20/2005	Mario Giorgio Prussiani	2502-1089	6302
466	7590	10/01/2007		
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			EXAMINER SCRUGGS, ROBERT J	
			ART UNIT 3723	PAPER NUMBER
			MAIL DATE 10/01/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/553,832

Applicant(s)

PRUSSIANI, MARIO GIORGIO

Examiner

Robert Scruggs

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-23, 26-31 and 33-43 is/are pending in the application.
- 4a) Of the above claim(s) 1-18, 24, 25 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-23, 26-31 and 33-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This office action is in response to the amendment received on July 13, 2006. Applicant has amended claim 1 to include structural limitations not previously considered. Deleted claims 1-18, 24, 25, 32 and added claims 33-43. Therefore, claims 19-23, 26-31, and 33-43 have been fully examined.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cutting head rotating about the third axis must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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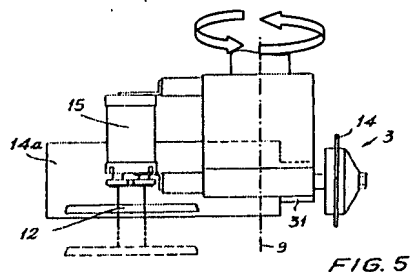
the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

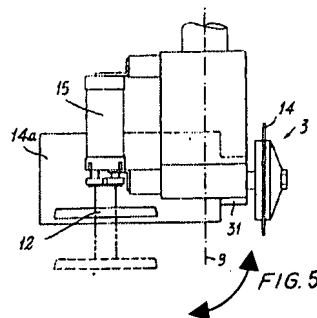
3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 19-43 are **Finally** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 19 and 33 disclose the limitation that the cutting head rotates about said third axis. Is the applicant trying to disclose that the entire cutting head (3) of the device rotates around axis (9) as shown below?



Or is the applicant trying to disclose that the cutting head (3) rotates (or pivots) about the axis (9) also shown below? The examiner is confused as to the exact movement that is taking place and therefore believes the claims are indefinite.



***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 19-23, 26, 33-38 are **Finally** rejected under 35 U.S.C. 103(a) as being unpatentable over Bando (5221034) in view of Warren (4777787).

In reference to claims 19, 26, 33 and 38, Bando discloses a numerical control mechanism (Column 2, Lines 10-22) for controlling a cutting head (Figure 14) having a blade (72) addressable within a cutting volume, wherein the numerical control means are arranged to move the cutting head along first (68), second (71) and third (73) axes and comprising means for manipulating member formed as a suction device (63), but lacks, a rotating said cutting head about said third axis. However, Warren teaches of rotating a cutting head (90) about a vertical axis (Figure 3) and also teaches of pivoting the cutting head (112) with respect to the third axis which constitutes rotating the head about a forth axis. It would have been obvious to one of ordinary skill in the art at the time the invention was made to the cutting head, of Bando, with a cutting head that rotates and pivots with respect to a vertical axis, in view of Warren, in order to alter the apex of the cutting head into various positions thereby allowing for multiple types of cuts to be performed on a workpiece.

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In reference to claims 20-23, 34-37, Bando also discloses that said manipulator means can move vertically (Column 7, Lines 29-30) are of a pneumatic type and are controlled by the numerical control means.

7. Claims 19-23, 26, 33-38 are **Finally** rejected under 35 U.S.C. 103(a) as being unpatentable over Christian (previously cited) in view of Warren (4777787).

In reference to claims 19, 26, 33 and 38, Christian discloses a numerical control mechanism (see abstract) for controlling a cutting head (Figure 2) having a blade (74) addressable within a cutting volume, wherein the numerical control means are arranged to move the cutting head along first, second and third axes (Figure 1) and comprising means for manipulating member formed as a suction device (54), but lacks, a rotating said cutting head about said third axis. However, Warren (4777787) teaches of rotating a cutting head (90) about a vertical axis (Figure 3) and also teaches of pivoting the cutting head (112) with respect to the third axis which constitutes rotating the head about a forth axis. It would have been obvious to one of ordinary skill in the art at the time the invention was made to the cutting head, of Christian, with a cutting head that rotates and pivots with respect to a vertical axis, in view of Warren, in order to alter the apex of the cutting head into various positions thereby allowing for multiple types of cuts to be performed on a workpiece.

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In reference to claims 20-23, 34-37, Christian also discloses that said manipulator means can move vertically (abstract) are of a pneumatic type and are controlled by the numerical control means.

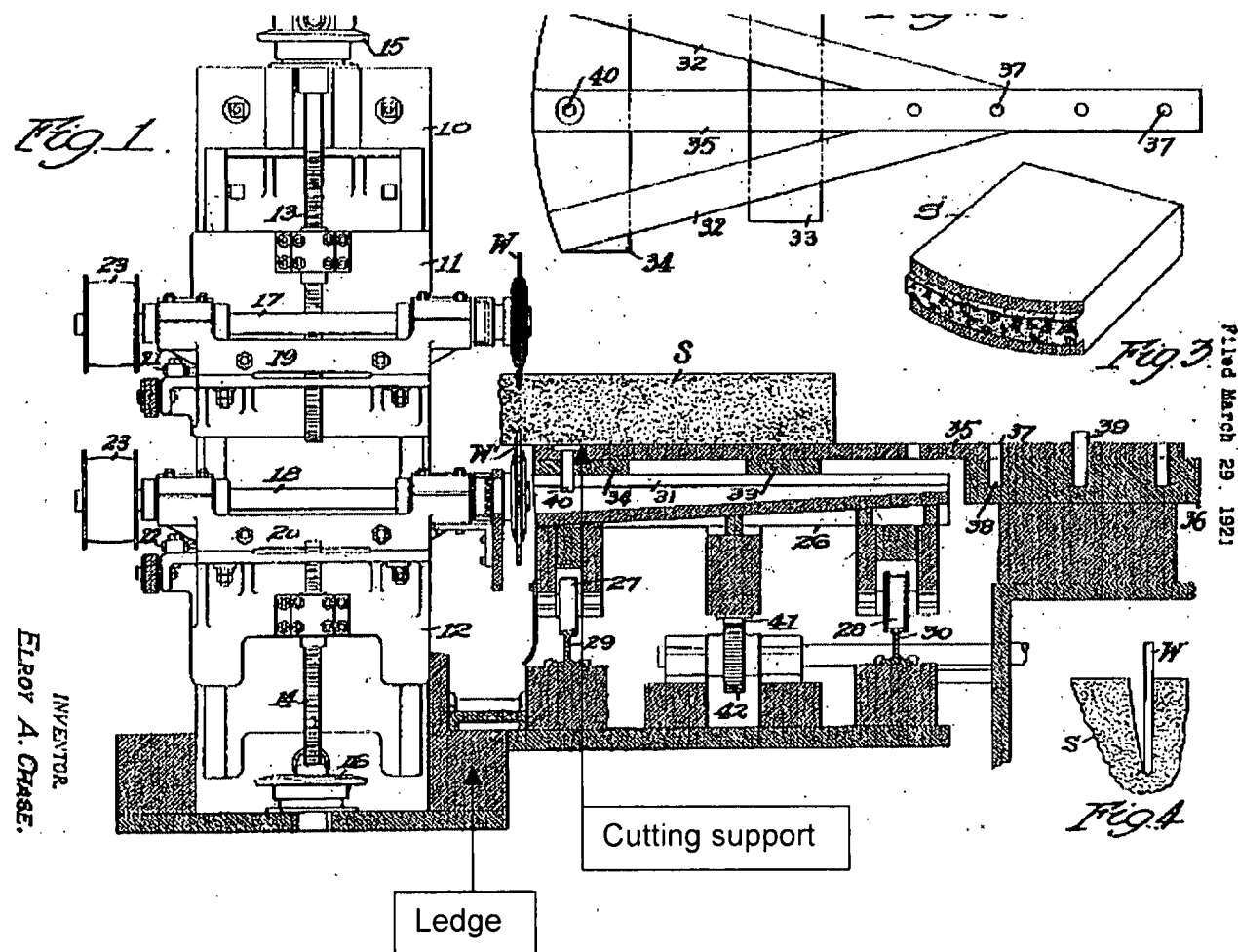
8. Claim 27-31, 39-43 are **Finally** rejected under 35 U.S.C. 103(a) as being unpatentable over Bando (5221034) in view of Warren (4777787) and Chase (1509585).

In reference to claims 27 and 39, Bando discloses the claimed previously mentioned above, but lacks, a cutting disc disposed below the workpieces. However, Chase discloses a lower cutting disc (W') disposed below the workpiece (S). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device, of Bando, with lower cutting disc, in view of Chase, in order to cut different sections of a workpiece simultaneously thereby increasing production and efficiency.

In reference to claims 28 and 40, Bando discloses the claimed previously mentioned above, but lacks, a cutting disc disposed to a side of the cutting support. However, Chase discloses a cutting disc (W') disposed to a side of the cutting support (See figure below). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device, of Bando, with lower cutting disc, in view of

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Chase, in order to cut different sections of a workpiece simultaneously thereby increasing productivity and efficiency.



In reference to claims 29 and 41, Chase also teaches that the cutting disc can be moved vertically (Lines 52-55).

In reference to claims 30 and 42, Chase also discloses that cutting disc is part of a milling machine rigid with a frame (10) mounted on vertical guides (13, 14).



In reference to claims 31 and 43, Chase also discloses that the vertical guides are fixed to a ledge projecting from said support (see figure above).

9. Claim 27-31, 39-43 are **Finally** rejected under 35 U.S.C. 103(a) as being unpatentable over Christian (previously cite) in view of Warren (4777787) and Chase (1509585).

In reference to claims 27 and 39, Christian discloses the claimed previously mentioned above, but lacks, a cutting disc disposed below the workpieces. However, Chase discloses a lower cutting disc (W') disposed below the workpiece (S). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device, of Christian, with lower cutting disc, in view of Chase, in order to cut different sections of a workpiece simultaneously thereby increasing production and efficiency.

In reference to claims 28 and 40, Christian discloses the claimed previously mentioned above, but lacks, a cutting disc disposed to a side of the cutting support. However, Chase discloses a cutting disc (W') disposed to a side of the cutting support (See figure above). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device, of Bando, with lower cutting disc, in view of Chase, in order to cut different sections of a workpiece simultaneously thereby increasing productivity and efficiency.

In reference to claims 29, and 41, Chase also teaches that the cutting disc can be moved vertically (Lines 52-55).

In reference to claims 30 and 42, Chase also discloses that cutting disc is part of a milling machine rigid with a frame (10) mounted on vertical guides (13, 14).

In reference to claims 31 and 43, Chase also discloses that the vertical guides are fixed to a ledge projecting from said support (see figure above).

### ***Response to Arguments***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. The amendment added the feature that the cutting head is rotated about vertical axis (third axis) therefore the previous arguments with respect to claims 19-23 and 26-31 have been considered but are moot in view of the new ground(s) of rejection.

11. The examiner would like to add that the combination to modify the devices of Bando and Christian with the teachings of Warren as discussed above could be made because the technique for improving a particular class of devices (i.e. cutting heads) was part of the ordinary capabilities of a person of ordinary skill in the art, in view of the teaching of the technique (i.e. cutting heads being rotatable and pivotal with respect to a third axis as taught by Warren) for improvement in other situations.

***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Scruggs whose telephone number is 571-272-8682. The examiner can normally be reached on Monday-Friday, 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RS



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